

CLAIM AMENDMENTS

1. (Currently Amended) A process for combusting coke of a coke-containing
5 fluid catalytic cracking (FCC) FCC catalyst in a regeneration unit of a FCC unit
comprising the introduction of oxygen-containing gas through a gas transport unit
into the regeneration unit and combusting the coke ~~means of~~ with an oxygen-
containing gas, wherein the oxygen-containing gas is cooled in a cooling unit to a
10 temperature below the dew point of water present in the gas thereby giving
condensation of water, wherein the condensed water is separated from the gas
before it is brought in contact with the coke-containing FCC catalyst.
2. (Previously Presented) The process of claim 1, wherein the oxygen-containing
gas is cooled before or during its stay in the gas transport unit.
- 15 3. (Previously Presented) The process of claim 2 wherein the oxygen-containing
gas is cooled before its stay in the gas transport unit.
4. (Previously Presented) The process of claim 3 wherein the oxygen-containing
20 gas is air.
5. (Previously Presented) The process of claim 4, wherein the air has a
temperature higher than 25°C.
- 25 6. (Previously Presented) The process of claim 5, wherein the air has a water
content before cooling of between 50 and 100% of total saturation.
7. (Previously Presented) The process of claim 6, wherein the air is cooled with a
30 temperature differential from 35 to 10°C.
8. (Previously Presented) The process of claim 7 wherein the gas transport unit is
an air blower.

9. (Previously Presented) The process of claim 8 wherein cooling is performed in an industrial chiller.

10. (Currently Amended) A method for decreasing the thermal deactivation of a catalyst in a fluid catalytic cracking (FCC) ~~FCC~~ regeneration process, wherein the regeneration process is performed by applying the process for combusting coke of a coke-containing FCC catalyst in a regeneration unit of a FCC unit comprising the introduction of oxygen-containing gas through a gas transport unit into the regeneration unit and combusting the coke ~~means of~~ with an oxygen-containing gas, wherein the oxygen-containing gas is cooled in a cooling unit to a temperature below the dew point of water present in the gas thereby giving condensation of water, wherein the condensed water is separated from the gas before it is brought in contact with the coke-containing FCC catalyst.

11. (Previously Presented) A regenerator apparatus for performing the process of claim 9, comprising inlet and outlet means and an inlet, wherein the apparatus further comprises a gas transport unit located in or at inlet means of the regenerator unit, and a cooling unit in the transport unit or upstream the transport unit at its suction side.

12. (Previously Presented) A process for regenerating an FCC catalyst containing coke, said process comprises:
cooling an oxygen-containing gas, having a water content and a non-cooled temperature, to a temperature below the dew point temperature of said oxygen-containing gas to thereby provide a cooled gas containing condensed water;
separating said condensed water from said cooled gas to provide a separated cooled gas; and,
introducing said separated cooled gas into an FCC regenerator, wherein said separated cooled gas is contacted with said FCC catalyst under coke combustion conditions.

13. (Previously Presented) A process as recited in claim 12, wherein said oxygen-containing gas comprises air.

14. (Previously Presented) A process as recited in claim 13, wherein said oxygen-containing gas has a temperature higher than 25 °C.

5 15. (Previously Presented) A process as recited in claim 14, wherein said water content of said oxygen-containing gas is in the range of from 50 to 100 % of total saturation.

16. (Previously Presented) A process as recited in claim 15, wherein said temperature is from 10 °C to 35 °C below said non-cooled temperature.

10